DRMS Instruction 6000.2

DRMS-DDH

DRMS ERGONOMICS PROGRAM

A. REFERENCES.

1. DoDI 6055.1, DoD Occupational Safety and Health Program.

2. Memorandum, Office of the Under Secretary of Defense (Environmental Security), Acquisition and Technology, February 4, 1997, subject: Ergonomics Program Requirements.

B. PURPOSE. This instruction provides the guidance for the ergonomics program component as an integral part of the safety and occupational health program.

C. APPLICABILITY AND SCOPE. This instruction applies to all DRMS/DLIS/DSIO components.

D. DEFINITIONS. Specific definitions/terms are outlined in the Glossary.

E. PROCEDURES. Specific procedures/instructions are outlined in Chapters 1 through 8.

F. RESPONSIBILITIES. Specific responsibilities are outlined in Chapter 1.

G. EFFECTIVE DATE AND IMPLEMENTATION. This instruction is effective and shall be implemented upon command signature.

H. INFORMATION REQUIREMENTS. (Reserved for future use.)

BY ORDER OF THE COMMANDER

JANINE DES VOIGNES
Executive Assistant

TABLE OF CONTENTS

CHAPTER 7 – EDUCATION AND TRAINING

A. The “Train the Trainer” Concept

B. Education Requirements

C. Training Requirements

CHAPTER 1 – INTRODUCTION

A. PURPOSE. This instruction provides guidance for the ergonomics program that is an integral part of the safety and occupational health (SOH) program.

1. The goals of the ergonomics program are to:

a. Prevent injuries and illness by eliminating or reducing worker exposure to Work-Related Musculoskeletal Disorders (WMSD) risk factors.
b. Reduce the potential for fatigue, error, and unsafe actions by adapting the job and workplace to be within worker's capabilities and physical limits.
c. Increase the overall productivity of the workforce.
d. Reduce workforce compensation claims and associated costs.
e. Early identification and prevention of WMSDs to preserve and protect DRMS/DLIS/DSIO’s work force while decreasing related costs.

2. Organizational Involvement. A cooperative partnership among all levels of the working community is essential in achieving the goals of the ergonomics program. Command emphasis, management commitment, and demonstrated involvement provide the motivation needed and organizational resources to implement a sound ergonomics policy. All levels of personnel (manager, supervisor, and worker) are responsible for injury prevention through the identification and resolving WMSDs.

B. REFERENCES.

1. Department of Defense Instruction (DODI) 6055.1, DOD Occupational Safety and Health Program.
2. Memorandum, Office of the Under Secretary of Defense (Environmental Security), Acquisition and Technology, February 4, 1997, subject: Ergonomics Program Requirements
3. Other associated publications and referenced forms are listed in appendix A.

C. ABBREVIATIONS AND TERMS. Abbreviations and terms used in this document are explained in the glossary.

D. OBJECTIVES.

1. To have an effective ergonomics program to:

a. Prevent workplace injuries.
b. Reduce medical and associated costs of work-related musculoskeletal disorders (WMSDs).
c. Interface with existing programs.

2. Ergonomics programs are required by references listed above.

E. SCOPE. This document applies to all DRMS/DLIS/DSIO organizations and includes guidance on worksite analysis, hazard prevention and control, occupational health care management, and education and training.

F. SPECIFIC PROCEDURES/RESPONSIBILITIES. In addition to the general responsibilities for implementing the SOH program, described in the DLA Safety and Health Instruction DLAI 6055.1, the following procedures/responsibilities are needed to implement the ergonomics program.

1. Primary Field Commanders will:

a. Demonstrate commitment to the ergonomics program.
b. Establish an ergonomics subcommittee as part of the SOH council as described in the DLA Safety and Health Instruction 6055.1. The SOH Council will be chaired by the commander or the commander's designee who will be a senior management official. DRMS field activities will be supported by the ergonomic committee and the host installation through their ISA's.
c. Integrate ergonomics into all phases of the SOH program.
d. Approve the ergonomics plan based on the recommendations of the SOH Council.
e. Provide sufficient funds and other resources to carry out all responsibilities related to this program.
f. Work with installation personnel, unions, and appropriate regulatory authorities to effectively address ergonomics issues.
g. Require that appropriate reporting and record keeping procedures be followed.

2. The SOH Official/Manager will:

a. Integrate ergonomic guidelines and standards into existing SOH training programs.
b. Designate a DRMS/DLIS/DSIO ergonomics officer (EO) and selects members of the ergonomics subcommittee (a subcommittee of the SOH council) based on recommendations from the EO.
c. Obtain and forward the following records to the DRMS/DLIS/DSIO EO:
(1) Injury and illness reports, Log of Federal Occupational Injuries and Illnesses or equivalent.
(2) Federal Employee Compensation Act (FECA) claims.
(3) Mishap Reports.
(4) Medical and safety records (as appropriate).
(5) Work force reports (including civilian pay reports of lost duty time as a result of injury or illness).
d. Provides reports to the DRMS/DLIS/DSIO command group.
e. Advises the commander on ergonomic issues.

3. Medical Staff will:

a. Provide medical components of the ergonomics program.
b. Perform or assist in performing in-depth ergonomic assessments as needed.
c. Advise the SOH Official/Manager on appropriate individuals for membership on the ergonomics subcommittee.

d. Ensure a written protocol is developed for the early recognition, evaluation, treatment, and follow-up of WMSDs among personnel (see chapter 6).

4. The DRMS/DLIS/DSIO EO will:

a. Be the industrial hygienist, occupational health nurse or other qualified health or safety professional who has received at least 40 hours of formal ergonomics training.

b. Advise the SOH Official/Manager on appropriate individuals for membership on the ergonomics subcommittee.

c. Chair the ergonomics subcommittee, providing an interface between the ergonomics subcommittee and the SOH Council.

d. Develop and implement the DRMS/DLIS/DSIO ergonomics plan, with the assistance of the ergonomics subcommittee and approval of the SOH council.

e. Manage, or actually perform the worksite analysis, and ensure its completion.

f. Ensure that an internal evaluation of the ergonomics program objectives is conducted with the assistance of the ergonomics subcommittee and report on the results annually to the SOH Council through the SOH Official/Manager. The evaluation should be conducted using the guidance in chapter 8, paragraph 8-4.

g. Ensure accurate record keeping of ergonomics subcommittee reports.

5. The Ergonomics Subcommittee will:

a. Under the SOH Council, assist in developing and implementing the DRMS/DLIS/DSIO's ergonomics plan.

b. Plan, oversee and participate in:

(1) Gathering and evaluating injury, lost work time, trend, productivity and complaint data on worksites and work processes.

(2) Identifying existing and potential WMSDs.

(3) Conducting worksite evaluations.

(4) Setting priorities for abatement of identified WMSDs.

(5) Implementing corrective actions.

(6) Providing appropriate worker training.

c. Develop methods to evaluate the effectiveness of the corrective actions and documents the results.

d. Work with medical personnel in the identification of potential WMSDs and advises medical personnel on ergonomic changes related to the workstation, tasks, and tools.

e. Provide semiannual reports to the SOH Council.

Note: Appendix B recommends participants of the ergonomics subcommittee.

6. Trained ergonomics personnel who have met the minimum standards as specified in the glossary will:

a. Serve on the DRMS/DLIS/DSIO ergonomics subcommittee.

b. Assist with the identification and control of WMSDs (alone or as members of the ergonomics subcommittee).

c. Perform in-depth ergonomic assessments of identified problematic work areas, tasks, and tools to determine WMSD risk factors.

d. Document all evaluations, recommendations, and actions related to ergonomics and the effectiveness of the actions.

e. Provide ergonomics training and education for personnel. Persons tasked to provide training should obtain refresher ergonomics training to maintain expertise.

f. Work with medical personnel as a team to identify potential WMSDs and inform medical personnel on ergonomic changes related to workstations, tasks, and tools.

g. Participate in the ergonomics subcommittee's semiannual ergonomics program evaluation and review.

h. Keep accurate records of identified WMSDs and high-risk work areas and solutions. Provide these records to the ergonomics subcommittee for review and tracking. The tracking records will be stored in SHIRS.

7. Industrial Hygiene (IH) personnel will:

a. Serve on the ergonomics subcommittee.

b. Consider WMSDs during routine worksite evaluations.

c. Perform or assist in performing in-depth ergonomic assessments as needed.

d. Assist in solving problems related to identified WMSDs.

e. Keep accurate records of identified WMSDs and high-risk work areas and solutions. Provide these records to the ergonomics subcommittee for review and tracking. The assessments will be tracked in the SHIRS.

f. Provide ergonomics training and education to personnel. Trainers should obtain refresher ergonomics training to maintain expertise.

g. Work with medical personnel in the identification of potential WMSDs and inform medical personnel on ergonomic changes related to the workstation, job tasks, and tools.

8. DRMS/DLIS/DSIO safety personnel trained in ergonomics will:

a. Serve on the DRMS/DLIS/DSIO ergonomics subcommittee.

b. Oversee the safety aspects of the ergonomics program.

c. Coordinate the annual SOH visit required by DLAI 6055.1 with the other key ergonomics program personnel, and considers or evaluates WMSDs during the safety inspection or survey.

d. Maintain appropriate SHIRS and illness records, such as accident reports and the Log of Federal occupational Injuries and Illnesses.

e. Review SHIRS injury and illness records related to WMSDs, develop trend analyses, and report results to the ergonomics subcommittee.

f. Provide or assist with ergonomics training and education. Persons who provide training should obtain refresher ergonomics training to maintain expertise.

g. Perform or assist in performing in-depth ergonomic assessments as needed.

h. Assist in solving problems related to identified WMSDs.

i. Keep accurate records of identified WMSDs and high-risk work areas and solutions. Provide this information to the ergonomics subcommittee for review and tracking. Record identified potential WMSDs and corrective actions in the SHIRS.

j. Work with medical personnel in the identification of potential WMSDs and inform medical personnel on ergonomic changes related to the workstations (processes, tasks, tools, etc).

9. Medical and occupational health care personnel trained in ergonomics will:

a. Serve on the DRMS/DLIS/DSIO ergonomics subcommittee. A representative from specific health care areas (for example, physician, nurse, occupational and physical therapists).

b. Develop a written protocol for the early recognition, evaluation, treatment, and follow-up of WMSDs among personnel (see chapter 6).

c. Develop and conduct baseline medical screening for new personnel whose positions have specific medical standards, physical requirements, or are covered by a medical evaluation program established under applicable regulations (5 CFR 339.301).

d. Assist trained ergonomics personnel to identify modified or restricted-duty jobs.

e. Make specific recommendations to the Human Resource Office (HRO) on the assignment of injured workers to modify or restricted-duty jobs. (See paragraph 5-6f for clarification on modified or restricted duty.)

f. Assist in ergonomics training and education.

g. Conduct ergonomic job evaluations when required.

10. The HROC/HRO staff will:

a. HROC will maintain the case file data on lost duty time as a result of injury or illness and provides this information for review by the ergonomics subcommittee.

b. Appoint at least one representative to serve on the ergonomics subcommittee. This person should be the Federal Employees Compensation Act (FECA) coordinator or FECA collateral duty personnel.

11. The Chief of Equipment Contracting, (or equivalent) will:

a. Appoint an advisory or support representative to serve on the ergonomics subcommittee.

b. Implement the recommendations of the ergonomics personnel to reduce WMSD risk factors when feasible.

c. Ensure the integration of ergonomic considerations into the purchase of new equipment.

12. The Chief of Facilities Management (or equivalent) will:

a. Integrate ergonomic considerations into facility modifications and construction.

b. Implement recommendations from trained ergonomics personnel to reduce WMSD risk factors when feasible.

c. Appoint an advisory or support representative to serve on the ergonomics subcommittee.

d. Ensure engineers and maintenance personnel:

(1) Prevent and correct WMSDs through job and workstation design and proper maintenance.

(2) Apply ergonomics concepts to conditions at the facility.

13. The Chief of Logistics Operations, Installation Engineering Support (or equivalent) will:

a. Ensure the integration of ergonomic considerations into the purchase of new operations equipment.

b. Implement recommendations from trained ergonomics personnel to reduce WMSD risk factors when feasible.

c. Consult with trained ergonomics personnel to assist in the evaluation of equipment and furniture for ergonomic design.

d. Appoint an advisory or support representative to serve on the ergonomics subcommittee.

14. Union Representatives will:

a. Serve as members of the ergonomics subcommittee.
b. Ensure that key personnel recognize and report WMSDs.

15. Supervisors will:

a. Supervise work practices of employees to assure safety.
b. Ensure personnel are trained to recognize and report hazardous work conditions.
c. Recognize early symptoms of potential WMSDs and report concerns thru the appropriate channels.
d. Routinely review work areas, tasks, and equipment for potential WMSD risk factors.
e. Support the ergonomics program by coordinating with trained ergonomics personnel to reduce risks to the workers.
f. Maintain effective schedules for facility, equipment, and tool maintenance, adjustments, and modifications.
g. Hold personnel accountable for following safe work practices and recognizes employee initiatives to improve operations, conditions and procedures through official recognition and incentives where appropriate.
h. When placing employees with WMSDs, supervisors will work with local health care personnel and the ergonomic sub-committee taking into account their recommendations and concerns.

16. Employees will:

a. Modify work practices as recommended to minimize WMSDs.
b. Notify supervisors of WMSD risk factors in the workplace.
c. Recognize and report symptoms of WMSDs early.
d. Perform recommended conditioning activities.
e. Actively participate in the suggestion process.
f. Routinely review work areas, tasks, and tools for potential WMSD risk factors.

G. TECHNICAL ASSISTANCE. Technical assistance may be requested through command channels to the DLA Director, ATTN: Chief of the Environmental Safety and Policy Office (DLA-J) telephone DSN 427-6234, commercial 1-703-767-6234

CHAPTER 2 – THE ERGONOMICS PROGRAM COMPONENT

A. GOALS. The goals of the ergonomics program are to:

1. Prevent injuries and illness by eliminating or reducing worker exposure to WMSD risk factors.
2. Reduce the potential for fatigue, error, and unsafe actions by adapting the job and workplace to be within worker's capabilities and physical limits.
3. Increase the overall productivity of the workforce.
4. Reduce workforce compensation claims and associated costs.
5. Early identification and prevention of WMSDs to preserve and protect DLA’s workforce while decreasing related costs.

B. ORGANIZATIONAL INVOLVEMENT. A cooperative partnership among all levels of the working community is essential in achieving the goals of the ergonomics program. Command emphasis, management commitment, and demonstrated involvement provide the motivation needed and organizational resources to implement a sound ergonomics policy. All levels of personnel (manager, supervisor, and worker) are responsible for injury prevention through the identification and resolving WMSDs.

C. EFFECTS OF WORK-RELATED MUSCULOSKELETAL DISORDERS

1. Health effects. Repeated biomechanical stress and microtrauma cause or aggravate WMSDs. Over time, repeated microtrauma can evolve into a painful, debilitating condition involving muscles, tendons, tendon sheaths, and nerves. Examples of WMSDs are:

    a. Tendinitis
    b. Tenosynovitis
    c. Bursitis
    d. Chronic muscle strain
    e. Nerve entrapment syndrome (carpal tunnel syndrome)

2. Economic effects. The expense associated with a poorly designed workplace is considerable and includes both direct and indirect costs.

    a. Direct costs include medical treatment, rehabilitation, and workers' compensation costs.
    b. Indirect costs include lost work time, decreased productivity, decreased work quality, retraining costs, and diminished morale.

D. OCCUPATIONAL RISK FACTORS

1. Research identifies the following as specific workplace conditions that can contribute to the development of WMSDs:
    a. Repetitive motions (especially during prolonged activities).
    b. Sustained or awkward postures.
    c. Excessive bending or twisting of the wrist.
    d. Continued elbow or shoulder elevation (for example, overhead work).

e. Forceful exertions (especially in an awkward posture).
f. Excessive use of small muscle groups (for example, pinch grip).
g. Acceleration and velocity of dynamic motions.
h. Vibration.
i. Mechanical compression.
j. Restrictive workstations (for example, inadequate clearances).
k. Improper seating or support.
l. Inappropriate hand tools.
m. Machine-pacing and production-based incentives.
n. Extreme temperatures.
o. Extended exposure to hazardous or annoying noise.

2. The combined effect of several risk factors in one job or workstation may lead to a higher probability of causing a WMSD.

CHAPTER 3 – THE DRMS/DLIS/DSIO ERGONOMICS PLAN

A. FOCUS. The DRMS/DLIS/DSIO ergonomics plan focuses on the identification and control of improper workplace and work process design to protect personnel from injury and illness due to exposure to occupational risk factors, as defined in (chapter 2, paragraph D).

B. PRACTICAL EFFECTS. Implementing a DRMS/DLIS/DSIO ergonomics plan will help reduce the number of WMSDs and related medical compensation claims, resulting in improved product quality, productivity, personnel morale and as decreased costs.

C. DEVELOPMENT AND APPROVAL.

1. The DRMS/DLIS/DSIO EO and the ergonomics subcommittee develop, document and maintain the DRMS/DLIS/DSIO ergonomics plan. They may:

a. Solicit input to the plan from health care providers, including physicians, nurses, occupational therapists, physical therapists, and physician assistants.
b. Integrate the plan with the installation or activity health promotion and wellness program coordinator as appropriate.

2. The installation SOH Council recommends the ergonomics plan to the commander for approval and communicates the plan to all managers, supervisors, and workplace personnel.

D. OUTLINE

1. The DRMS/DLIS/DSIO ergonomics plan should reflect the needs and requirements of the individual activities of the DRMS/DLIS/DSIO. The DRMS/DLIS/DSIO EO and the subcommittee may use the structure and content provided in this document in developing a DRMS/DLIS/DSIO ergonomics plan that addresses each of the items.

a. Program goals and objectives.
b. Program interface with existing programs.
c. Specific critical program elements for ergonomic intervention:
(1) Worksite analysis (chapter 4).
(2) Hazard prevention and control (chapter 5).
(3) Health care management (chapter 6).
(4) Education and training (chapter 7).
(5) Ergonomics program evaluation (chapter 8).
(6) Acquisition (chapter 1).

2. The extent of involvement in each of the six critical program elements in paragraph D1c above will vary according to the hazards and concerns at each activity; however, some degree of activity in each of the six critical program elements is required for an effective program.

CHAPTER 4 – WORKSITE ANALYSIS

A. PROBLEM IDENTIFICATION. Use the following passive and active surveillance to identify jobs or worksites with WMSD risk factors.

1. Systematic Passive Surveillance. This procedure involves the analysis of data provided in existing monthly or quarterly reports. This analysis can identify WMSD problems, set intervention priorities, and organize the ergonomics effort. The office responsible for maintaining logs, or reports will perform the systematic passive surveillance and communicate the results to the EO and the ergonomics subcommittee. Sources of data include:

a. Routine injury and illness reports, including DLA Form 1591 Mishap Reports.
b. Log of Federal occupational injuries and illnesses or equivalent.
c. FECA claims.
d. Medical and safety records.
e. Workforce reports (including civilian and active-duty personnel and pay reports of lost duty time as a result of injury or illness) and suggestions.

2. Systematic Active Surveillance. This procedure involves focused and active efforts to gather information about WMSD hazards at worksites and to identify workers at risk of developing a cumulative trauma disorder (CTD). Trained ergonomics personnel (see glossary) will perform active surveillance in conjunction with IH or safety surveys or regular training.

a. Examples of active surveillance procedures include:
(1) Questionnaires and surveys. Supervisor and worker questionnaires and symptom or body part discomfort surveys provide information about WMSD hazards, often before actual injuries occur. Trained ergonomics personnel can administer these surveys during walk-through surveys or as part of regular training.
(2) Observation. Direct observation by trained ergonomics personnel conducting regular walk-through IH or safety surveys can identify WMSD hazards. Worker interviews during these surveys can identify tasks or situations that are uncomfortable and may indicate WMSD risk factors. For example workers note that cold temperatures make it difficult to grip hand tools.
(3) Sentinel event or incident reporting. Specific health or performance events, such as wrist pain, back pain, or increased errors, may be indicative of WMSD risk factors. Use a specific reporting procedure to facilitate reports.
(4) Case referrals. Use case referrals to identify a work area with potential WMSD risk factors. For example, a laboratory technician seeks medical care for hand and wrist pain and provides an occupational history that indicates possible worksite risk factors.
b. The presence of one WMSD should trigger an active surveillance survey using appropriate questionnaires or surveys. Trained ergonomics personnel will perform systematic active surveillance at all worksites or re-evaluate the worksite at least once per year. Also, trained ergonomics personnel will perform walk-through surveys for any new or significantly changed job, process, equipment, or method.
c. In many cases, corrections to the WMSD hazards or risk factors are simple, quick, on-the-spot workplace changes. Trained ergonomics personnel conducting regular walk-through surveys can identify and implement the solution immediately. Chapter 5

provides information on hazard prevention and control. More complex problems will require prioritization and detailed analysis.

d. If a worksite or job is identified as high risk, special medical surveillance may be indicated. Chapter 6 provides information on health care management.

B. PRIORITIZATION. The ergonomics subcommittee or the appropriate subcommittee member (for example, IH, safety, occupational health nurse, etc.) will prioritize activities and work-sites for detailed analysis based on the passive and active surveillance information. The prioritization may be based on incidence rates (see glossary), the number of workers affected, direct costs, lost work time, or severity of cases. Calculate incidence and prevalence rate by unit, work section, or job series to identify high-risk areas. Use FECA claims information to identify high cost injuries and high-risk work areas.

C. DETAILED ANALYSIS

1. To further evaluate those jobs or worksites having WMSD risk factors as determined by systematic passive and active surveillance, complete a more detailed analysis. When conducting the detailed analysis, trained ergonomics personnel should systematically:

a. Consider the concept of multiple causation (see glossary) and the degree of WMSD risk.

b. Look for trends, including age, gender, work task, and time of injury.

c. Identify the work tasks or portions of the process that contain risk factors.

d. Identify both problems and solutions.

2. The following data, analysis tools, and methods may be helpful during a detailed analysis:

a. Incidence rates (Log of Federal occupational Injuries and Illnesses or equivalent), accident and injury reports, and lost work time or absenteeism reports by job, unit, department, or facility.

b. Checklists, questionnaires, and interview.

c. Direct observation, videotape analysis, and job analysis.

d. Tests, such as:

(1) Revised National Institute for Occupational Safety and Health (NIOSH) Equation for the Design and Evaluation of Manual Lifting Tasks.

(2) Static and dynamic strength testing.

(3) Timed activity analysis.

(4) Biomechanical analysis.

(5) Cardiovascular measurements.

CHAPTER 5 – HAZARD PREVENTION AND CONTROL

A. INTERVENTION HIERARCHY. The primary method of preventing and controlling exposure to WMSD hazards is through effective design (or redesign) of a job or work-site. Paragraphs B through G below define intervention methods in order of priority.

B. PROCESS ELIMINATION. Elimination of the demanding process essentially eradicates the WMSD hazard. For example, eliminate the use of the hand-held bar code scanner for inventory management personnel by providing an automatic bar code scanner.

C. ENGINEERING CONTROLS. Ergonomic engineering controls redesign the equipment or worksite to fit the limitations and capabilities of workers. Equipment or worksite redesign typically offers a permanent solution. For example, provide a video display terminal workstation that can be adjusted to a wide range of anthropometric dimensions.

D. SUBSTITUTION. Substituting a new work process or tool (without WMSD hazards) for a work process with identified WMSD hazards can effectively eliminate the hazard. For example, replace hand tools that require awkward wrist positions (extreme wrist flexion, extension, or deviation) with tools that allow a neutral wrist posture.

E. WORK PRACTICES. Practices that decrease worker exposure to WMSD risk factors include changing work techniques, providing personnel conditioning programs, and regularly monitoring work practices. Also included are maintenance, adjustment, and modification of equipment and tools as needed.

1. Proper work techniques include methods that encourage:

   a. Correct posture.
   b. Use of proper body mechanics.
   c. Appropriate use and maintenance of hand and power tools.
   d. Correct use of equipment and workstations.

2. Personnel conditioning refers to the use of a conditioning or break-in period. New and returning personnel may need gradual integration into a full workload, depending on the job and the person. Supervisors, trained ergonomics personnel, and health care personnel should identify those jobs that require a break-in period. Health care personnel should evaluate those personnel returning from a health-related absence and define the break-in period for each individual person (5 CFR 339.301).

3. Regular monitoring of operations helps to ensure proper work practices and to confirm that the work practices do not contribute to cumulative trauma injury or hazardous risk factors.

4. Effective schedules for facility, equipment, and tool maintenance, adjustments, and modifications will reduce WMSD hazards. This includes ensuring proper working conditions, having sufficient replacement tools to facilitate maintenance, and ensuring effective housekeeping programs. Tool

and equipment maintenance may also include vibration monitoring.

F. ADMINISTRATIVE CONTROLS. Use administrative controls to limit the duration, frequency, and severity of exposure to WMSD hazards. Examples of administrative controls include, but are not limited to:

1. Decreasing production rate requirements and limiting overtime work to reduce the number of repetitions.

2. Reducing the number and speed of repetitions by reducing line or production speed or by having worker input regarding production speed (that is, using worker-based rather than machine-based production speed).

3. Providing rest breaks to relieve fatigued muscle-tendon groups. Determine the length of the rest break by the effort required, total cycle time, and the muscle-tendon group involved.

4. Increasing the number of personnel assigned to the task (for example, lifting in teams rather than individually).

5. Instituting job rotation as a preventive measure, with the goal of alleviating physical fatigue and stress to a particular set of muscles and tendons. Do not use job rotation in response to symptoms of cumulative trauma. This can contribute to symptom development in all personnel involved in the rotation schedule rather than preventing problems. Trained ergonomics and health care personnel should conduct an analysis of the jobs used in the rotation schedule.

6. Providing modified- or restricted-duty assignments to allow injured muscle-tendon groups time to rest, assisting in the healing process. Make every effort to provide modified- or restricted-duty assignments when physical limitations (as identified by a health care provider) allow the worker to return to work performing less than his or her normal work requirements. In regard to modified- or restricted-duty assignments:

a. A health care provider should specifically identify assignments or job tasks for the individual worker based on his or her symptoms, capabilities, and limitations.
b. Health care providers with specific knowledge in both occupational demands and cumulative trauma injuries should cooperate with trained ergonomics personnel to develop a list of jobs with low WMSD risk.
c. Civilian personnel representatives and supervisors, in conjunction with health care personnel, should identify modified-duty assignments and tasks and write descriptions for these assignments and tasks that conform to documented requirements. A combination of tasks from one or more jobs can be used as a modified duty assignment. The description for each modified duty assignment should include WMSD risk factors and muscle-tendon groups required to perform the job.

G. PERSONAL PROTECTIVE EQUIPMENT. Personal protective equipment (PPE) is not necessarily recommended for controlling exposure to WMSD hazards, since little research has been conducted to support claims of its usefulness.

1. Appliances, such as wrist rests, back belts, back braces, etc., are not considered PPE. Before purchasing such devices, discuss their effectiveness with trained ergonomics personnel, The Office of The Surgeon General (OTSG) does not support the blanket use of back belts as a back injury preventive

measure. Anti-vibration gloves are an example of PPE that addresses WMSD hazards.

2. Consider WMSD hazards when selecting PPE. The PPE:

a. Should be properly worn or used according to manufacturers' specifications.
b. Should be available in a variety of sizes.
c. Should accommodate the physical requirements of personnel and the job.
d. Should not contribute to WMSD hazards.

CHAPTER 6 – HEALTH CARE MANAGEMENT

A. WRITTEN PROTOCOL. Health care personnel will develop a written protocol for the early recognition, evaluation, treatment, and follow-up of WMSDs. This chapter provides the structure and much of the content of this protocol. The protocol includes communication with supervisors and military and civilian personnel to identify work-site problems and implement recommendations. Health care personnel should tailor the protocol to their specific activity and provide it to the ergonomics subcommittee for review.

B. EARLY EVALUATION OF PATIENTS. Early recognition and health care management of WMSDs is critical to reduce the impact of injury on both personnel and employer.

1. Common symptoms of WMSDs can include (but are not limited to) pain, tingling, numbness, stiffness, and weakness in the neck, shoulders, arms, hands, back, and legs. Other symptoms can include headaches, visual fatigue, and increased errors.

2. Personnel with symptoms of WMSDs should report to health care personnel for an evaluation.

a. Active-duty military personnel should report to their primary care provider.
b. Civilian personnel should report to DRMS-DDH or their Occupational Health Services with the appropriate forms: Department of Labor (DOL) Form CA-2 (Notice of Occupational Disease and Claim for Compensation) for all WMSDs except back injuries which require DOL Form CA-1 (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation) and DOL Form CA-16 (Authorization for Examination and/or Treatment).

3. Supervisors should ensure that military personnel with WMSD symptoms report for a medical evaluation in a timely manner. Supervisors should encourage civilian personnel to report for a medical evaluation.

4. Supervisors may not place disincentives as an impediment to personnel reporting WMSDs.

C. MEDICAL EVALUATION. The initial medical evaluation of a patient with a possible WMSD should include a detailed medical and occupational history and a physical examination. A standardized questionnaire is a useful tool for obtaining the history. Health care personnel, within their approved scope of practice, will:

1. Complete a medical and occupational history that includes:

a. Job title or series, and number of years and months at that job.
b. Prior work history.
c. A detailed description of current job tasks and the amount of time normally spent on each task.
d. A detailed description of symptoms to include location, character (such as burning, sharp, dull, pins and needles), severity, onset, duration, and exacerbating and relieving factors.
e. Lost time or limited duty due to symptoms.

f. Prior evaluation, diagnosis, and treatment of symptoms.
g. Other existing medical conditions and history of trauma and surgery.
h. Activities and hobbies outside of work.
i. Current medications.

3. Conduct a physical examination that includes, but is not limited to:

a. Appearance (swelling, muscle atrophy, erythema, ecchymosis).
b. Range of motion and muscle strength.
c. Neurologic assessment (motor, sensory, reflexes).
d. Vascular assessment (pulses, capillary refill).
e. Evaluation for pain and tenderness.
f. Special tests, such as median nerve percussion (Tinel’s sign) and the wrist flexion test (Phalen's test) when appropriate.

3. Perform additional testing as indicated, such as nerve conduction velocities, laboratory tests, and radiographic procedures.

D. TREATMENT. Encourage civilian personnel with a suspected WMSD to seek evaluation and treatment in a servicing medical treatment facility where possible. Health care personnel will usually try conservative therapy before invasive treatment.

E. MODIFIED OR RESTRICTED DUTY. Modified or restricted duty health care personnel will coordinate with trained ergonomics personnel to recommend duty assignments that will not aggravate a patient's condition, as discussed in chapter 5, paragraph F6.

F. FOLLOW-UP. Personnel (healthcare or other trained personnel) will perform regular follow-up for employees being treated for WMSDs to monitor the efficacy of therapy and work-site intervention.

G. MEDICAL SURVEILLANCE

1. Work-related musculoskeletal disorders do not require a general screening medical surveillance program. Instead, use the methods of problem identification as described in chapter 4. Health care personnel should cooperate with members of the ergonomics subcommittee:

a. Where health care personnel are located on site, it is recommended that they participate in the systematic work-site walk-through survey when practical. Participation will add to the effectiveness of the survey, help to maintain proficiency and knowledge about local operations and work practices.
b. Provide written documentation of the walk-through survey to the DRMS/DLIS/DSIO EO. Documentation should include date, area(s) visited, risk factors identified, actions taken (if any), and any needed prioritized follow-up.

2. Special medical surveillance may be indicated for:

a. Specific jobs where a high incidence of WMSDs has been demonstrated.
b. Specific jobs that have been identified as high risk based on systematic active surveillance and detailed analysis as discussed in chapter 4.

3. Where deemed prudent, maintain baseline and periodic health assessment results in personnel medical records. Pay attention to any changes that could indicate a WMSD.

H. REPORTING. Occupational health, safety, and health care personnel will use the following forms to document WMSDs and perform passive surveillance. These findings will be reported to the ergonomics subcommittee.

1. SHIRS Log of Occupational Injuries and Illnesses or equivalent.

2. DOL Form CA-2 (all WMSDs (where symptom are reported) except back injuries).

3. DOL Forms CA-1, CA-16, and CA-17 (Duty Status Report).

4. Standard Form (SF) 600 (Chronological Record of Medical Care) in the medical record.

I. WORKSITE EVALUATION REFERRALS

1. Health care personnel who treat a patient with a suspected WMSD will request a workstation evaluation for the patient. Trained ergonomics personnel, together with healthcare personnel, should conduct the workstation evaluation.

2. Flow diagrams depicting the handling of traumatic injury and occupational disease and illness are available.

CHAPTER 7 – EDUCATION AND TRAINING

A. THE “TRAIN THE TRAINER” CONCEPT. Administer training programs using the following process.

1. Ergonomics experts provide training to develop trained ergonomics personnel.

2. Trained ergonomics personnel:

a. Then train others about ergonomics, including supervisors and collateral duty safety monitors and workers.
b. May also train others, who can help with recognizing WMSDs representing activities or departments. Representatives may assist other department members in recognizing and reporting ergonomic issues in the workplace.

B. EDUCATION REQUIREMENTS.

1. The DRMS/DLIS/DSIO EO will have:

a. A minimum of 40 hours of formal ergonomics training. Formal training is classroom instruction, exercises, supervised workstation assessment, and individual learning assignments.
b. Training and experience sufficient to identify WMSDs and risk factors.

2. Key trained ergonomics personnel (typically occupational health professionals and other safety or health care personnel) will have:

a. A minimum of 40 hours of formal ergonomics training.
b. Training and experience sufficient to identify WMSDs and risk factors.

3. Ergonomics subcommittee members, and other personnel (e.g., managers, supervisors, collateral duty safety monitors) providing assistance in recognizing WMSDs will receive basic ergonomics training, to include elements listed in paragraph 7-3c(2), from trained ergonomics personnel or as outlined by the SOH Manager/Officer in the DRMS/DLIS/DSIO Ergonomics Plan.

4. For information on available courses, request assistance through DLA-J. Information and training is also available from USACHPPM.

C. TRAINING REQUIREMENTS. Personnel responsible for administering the installation ergonomics program will receive appropriate special training. Training is necessary for all levels of personnel to understand and recognize potential WMSDs and actively participate in the ergonomics effort.

1. Personnel requiring training:

a. All personnel who are exposed to WMSD hazards.

b. Supervisors.
c. Managers.
d. Engineers and maintenance personnel.
e. SOH personnel.
f. Collateral duty safety personnel.

2. Personnel who may conduct training:

a. Trained ergonomics personnel.
b. Health care personnel conducting specific portions of training, such as those related to health risks.

3. Curriculum Considerations. Trained ergonomics personnel will:

a. Present training at a level appropriate to ensure audience comprehension.
b. Include in the training curriculum an overview of:
(1) The potential risks of WMSDs.
(2) The possible causes and symptoms.
(3) How to recognize symptoms and report WMSD.
(4) The means of prevention.
(5) The sources of treatment.
c. Include methods for evaluating the effectiveness of the ergonomics effort, as discussed in chapter 8.

4. Types of Training

a. General training. Upon evaluation of the potential WMSD risks, personnel who are potentially exposed to WMSDs hazards will receive formal instruction on hazards associated with their jobs and equipment. Personnel will receive training at an their initial job orientation and annually thereafter until the WMSD hazard is eliminated. Based on the ergonomic risk assessment the general training will include elements listed in paragraph 7-3c(2).
b. Specific training. New and reassigned personnel who are exposed to WMSDs will receive an initial orientation and hands-on training from trained ergonomic personnel or immediate supervisor prior to being placed in a full-production position. The initial orientation will include:
(1) A demonstration of the proper use and care of, tools and equipment.
(2) Use of safety equipment.
(3) Use of safe and proper work procedures, such as proper lifting techniques.

CHAPTER 8 – ERGONOMICS PROGRAM EVALUATION

A. EVALUATION REQUIREMENTS. Evaluations of DRMS/DLIS/DSIO or other ergonomics programs may be performed by external or internal sources to assess program effectiveness.

B. EXTERNAL EVALUATIONS

1. Occupational Safety and Health Administration (OSHA) inspections could result in citations to the commander for ergonomic deficiencies that are identified in the workplace.

2. DLA may request USACHPPM or other Service Agency:

a. Conduct ergonomic surveys at activities.
b. Evaluate elements of ergonomic programs.
c. Assist with ergonomics program development.

C. INTERNAL EVALUATIONS. The DRMS/DLIS/DSIO EO ensures evaluation of the ergonomics effort regarding program participation and effectiveness. Examples of methods to measure both of these elements are listed below:

1. Program participation.

a. Number of requests for ergonomic assistance by management occurring during a specified period.
b. Number of personnel suggestions related to ergonomics during a specified period.
c. Number of educational programs in ergonomics offered
d. Number of personnel attending educational programs.

2. Program effectiveness.

a. Number of general or systematic identifications of potential WMSDs.
b. Number of detailed analyses conducted (chapter 4, paragraph C).
c. Number of high priority listings relating to ergonomics.
d. Change in the incidence rate (see glossary) of ergonomically related FECA claims or dollar amount of new FECA claims within a particular period.
e. Change in the incidence rate of ergonomically related illness or injury reports filed for military and civilian personnel.
f. Change in the incidence rate of ergonomically related illness or injury by department or unit.
g. Change in the incidence rate of lost- or restricted-duty time due to ergonomically related illness or injury.
h. Change in the number of new job reassignments due to ergonomically related illness or injury.
i. Change in productivity or production costs that can be attributed to ergonomic interventions.

Note: In some cases, there may be an increase in illness or injury reporting at the start of an ergonomics program due to increased personnel and supervisor awareness.

This reporting rate will decrease as a well-managed, effective ergonomics program is integrated into the workplace.

D. REGULAR INTERNAL EVALUATION AND REVIEW

1. The DRMS/DLIS/DSIO EO and the ergonomics subcommittee will:

a. Conduct at least a semiannual program evaluation and review.
b. Present the results of this program evaluation and review to the installation SOH Council.
c. Communicate the results of the program evaluation and review to top management and personnel.

2. The program evaluation assesses the implementation, progress, and effectiveness of the installation ergonomics plan. It should include:

a. A summary in-progress report or program update.
b. A summary of results of external evaluations as defined in paragraph 8B above (if performed).
c. Program participation and effectiveness measures defined in paragraph 8C above.
d. Plans, goals, and accomplishments for the program as a whole and by the critical program elements cited in chapter 3, paragraph D1c.
e. Identification of trends, deficiencies, and corrective actions needed.
f. New or revised program goals, priorities, and time lines.

3. Use the following information to develop the evaluation and review:

a. Analysis of trends in injury or illness rates according to:
(1) Health care facility sign-in logs.
(2) Log of Federal Occupational Injuries and Illnesses or an equivalent log (SHIRS).
b. Review of results of installation evaluations.
c. Before and after surveys or evaluations of workstation improvements.
d. Observation of work practices to determine the effect of training and education.
e. Personnel surveys or interviews conducted by department, job title, or workstation to monitor trends.

APPENDIX A – REFERENCES

Section I - Related Publications

1. DODI 6055.1 (Draft), DOD Occupational Safety and Health Program (required)

2. E.O. 12196, Occupational Safety and Health Programs for Federal Employees (required)

3. PL 91-596, Occupational Safety and Health Act of 1970, as amended (29 USC 651, et seq. (1976) (required)

4. Memorandum, Office of the Under Secretary of Defense (Environmental Security), Acquisition and Technology, 4 February 1997, subject: Ergonomics Program Requirements (required)

5. 5 CFR 339.301, Authority to require an examination. (Available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.)

6. 29 CFR 1960.8, Agency responsibilities. (Available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.) (required)

7. Memorandum, Defense Logistic Agency, Environmental and Safety, March 19, 1999, subject: Ergonomics Program Requirements (required)

8. ANSI Z-365 (Working Draft). American National standards Institute. (1996) Control of Work-Related Cumulative Trauma Disorders, Part 1 Upper Extremities. National Safety Council (NSC), Itasca, IL. (Available at cost from NSC, P.O. Box 558, Itasca, IL 60143-0429.)

9. USACHPPM TG 220 (Draft). Ergonomics in Action. U.S. Army Center for Health Promotion and Preventive medicine and the U.S. Army Safety Center.

10. Chapanis, A., 1991. To Communicate the Human factor 6 Message, You Have to Know What the Message Is and How to Communicate It. Human Factors Society Bulletin, Vol 34 (11): 1-4.

11. Directorate of Civilian Personnel and Installation Safety. 1992 Supervisor's Guide to the Civilian Resource Conservation Program. (Available from the Directorate of Civilian Personnel and Installation Safety, Fort McPherson, Georgia.)

12. Revised NIOSH Equation for the Design and Evaluation of Manual Lifting Tasks. (Available from NIOSH, 4676 Columbian Parkway, Cincinnati, OH 45226.)

13. U.S. Department of Labor, OSHA. 1991. Ergonomics Program Management Guidelines for Meat Packing Plants, OSHA Publication #3123. (Available from U.S. Department of Labor, OSHA, 200 Constitution Ave., N.W., N3651, Washington, DC 20210.)

APPENDIX A

Section II - Referenced Forms

1. DOL Form CA-1, Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation

2. DOL Form CA-2, Notice of Occupational Disease and Claim for Compensation

3. DOL Form CA-16, Authorization for Examination And/or Treatment

4. DOL Form CA-17, Duty Status Report

5. SF 600, Chronological Record of Medical Care

6. OSHA Form 200, Log of Federal Occupational Injuries and Illnesses

7. Standard forms (SF) are available through local publications. Log of Federal Occupational Injuries and Illnesses and DOL forms are available from the U.S. Department of Labor, OSHA, 200 Constitution Ave., N.W., Washington, DC 20210.

APPENDIX B
RECOMMENDED MEMBERSHIP OF THE ERGONOMICS SUBCOMMITTEE

1. Chairperson. The DRMS/DLIS/DSIO EO:

a. Serves as chairperson of the ergonomics subcommittee.
b. Is a health or safety professional who must receive at least 40 hours of formal training in ergonomics (Chapter 7, paragraph B1 (i.e., OH physician, industrial hygienist, OH nurse, other health care professional, or SOH official/manager who has received at least 40 hours of formal training in ergonomics.))

2. Membership. The ergonomics subcommittee will include, but need not be limited to, representatives of the following offices:

a. Core membership.
(1) Industrial hygienist
(2) Safety professional
(3) Health Care Activity (for example, physician, nurses, occupational and physical therapists, physician assistant, and other trained medical personnel)
(4) Union Representative(s)
(5) CPO/Human Resources
(6) FECA Coordinator
b. Suggested support and advisory membership.
(1) Director of Contracting Support (or equivalent)
(2) Director of installation maintenance
(3) Logistics Chief
(4) Engineers and maintenance personnel

3. Training. All subcommittee members should receive appropriate ergonomics training as discussed in chapter 7.

GLOSSARY

SECTION I – ABBREVIATIONS

ANSI	American National Standards Institute
CFR	Code of Federal Regulations
CPO	Civilian Personnel Office
CTD	Cumulative Trauma Disorder
DOD	Department of Defense
DODI	Department of Defense Instruction
DOL	Department of Labor
E.O.	Executive Order
FECA	Federal Employee Compensation Act
EO	Ergonomics Officer
IH	Industrial Hygiene
MTF	Medical Treatment Facility
NIOSH	National Institute for Occupational Safety and Health
NSC	National Safety Council
OH	Occupational Health
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
OTSG	Office of the Surgeon General
PL	Public Law
PPE	Personal Protective Equipment
SF	Standard Form
SOH	Safety and Occupational Health

TB MED	Technical Bulletin, Medical
TDA	Table of Distribution and Allowances
TG	Technical Guide
TOE	Table of Organization and Equipment
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USASC	U.S. Army Safety Center
WMSDs	Work-related Musculoskeletal Disorders

SECTION II – TERMS

Anthropometry
The study of the physical dimensions of people, including size, breadth, girth, distance between anatomical points, and joint range of motion. This information is used in the design and analysis of workstations, tools, and equipment.

Cumulative Trauma Disorders
Disorders of the musculoskeletal or nervous system which are the result of, or contributed to by, the biomechanical risk factors listed in paragraph 2-4. CTDs are a class of musculoskeletal disorders involving damage to the tendons, tendon sheaths, synovial lubrication of the tendon sheaths, and bones, muscles, and nerves. Synonymous terms include repetitive injury, occupational overuse syndrome, and repetitive strain.

Equivalent Civilian Training
A minimum of 40 hours training covering WMSDs; workstation and job design; hand tool design; current regulatory requirements and issues; analysis and design of manual materials handling tasks; analysis and design of the office environment; and conducting, analyzing, documenting, and presenting an ergonomic work station evaluation, including hands-on experience.

Ergonomics
A body of knowledge about human abilities, human limitations, and other human characteristics that are relevant to the design of tools, machines, systems, tasks, jobs, and environments for safe, comfortable, and effective human use. The aim of the discipline is to fit the job to the person in order to:

a. Prevent the development of occupational injury or illness.
b. Reduce the potential for fatigue, error, or unsafe acts.
c. Increase effective, efficient work.

Ergonomics Expert. An individual who:
a. Possesses a recognized degree or professional credentials in ergonomics or human factors engineering.
b. Demonstrates the ability to identify and correct WMSDs in the workplace.
c. Teaches the 40-hour ergonomics course for trained ergonomics personnel.
d. Provides consultation only in cases in which trained ergonomics personnel are unable to solve identified problems. In most cases, an ergonomics expert will not be available at each installation.

Ergonomics Team
Those responsible for identifying and correcting occupational hazards in the workplace, including trained ergonomics personnel, health care providers, industrial hygienists, safety personnel, engineers, and other support personnel, managers, and supervisors.

Health Care Personnel
Physicians, chiropractic physicians, nurses, occupational therapists, physical

therapists, physician assistants, and other health care professionals and their related, supervised technicians (for example, certified occupational therapy assistants and licensed practical nurses). Health care personnel participating in the ergonomics program should have training in basic ergonomics and epidemiology and be up-to-date in the systematic recognition, evaluation, treatment, and rehabilitation of WMSDs.

Microtrauma
A series of minor stresses to the body, each of which alone does not cause discernible damage; however, their accumulation over time can lead to WMSDs. These disorders (injuries or syndromes) are also known as CTDs, overuse disorders, repetitive motion injuries, repetitive strain injuries, and occupational motion-related injuries.

Multiple Causation
The combined effect of several risk factors in one job, operation, or workstation, which may increase the possibility of WMSDs.

Occupational Hazards
Workplace conditions that may harm the worker: improperly designed workstations; tools and equipment; improper work methods; and excessive tool or equipment vibration. other examples include aspects of workflow, line speed, posture, force required, work and rest regiment, and repetition rates.

Occupational Illness and Injury
a. To be recorded as an occupational illness or injury, the condition must be diagnosed by a physician, registered nurse, or other person who, by training or experience, is capable of making such a determination (such as an occupational therapist, physical therapist, or physician assistant).
b. To be classified as an occupational illness or injury, the condition must meet the following criteria:
(1) Either physical findings or subjective symptoms must exist, that is, at least one physical finding (for example, positive Tinells, Phalen's, or Finkelstein's test; swelling, redness, or deformity; or loss of motion or strength) or at least one subjective symptom (for example, pain, numbness, tingling, aching, stiffness, or burning).
(2) At least one of the following response actions must occur: medical treatment (including self-administered treatment if made available to personnel by their employer), lost or restricted work activity, or transfer or rotation to another job.
(3) Cumulative trauma disorders must be associated with repeated trauma, and exposure at work must have caused or contributed to the onset of symptoms or aggravated existing symptoms.

Pinch Grip
A grip that involves one or more fingers and the thumb.

Rates (incidence, severity, prevalence)
Incidence rate (i.e., new case) rate (per 100 worker-years per year):

$$= \frac{\text{Number of new cases during the past 12 months x 200,000 hours}}{\text{Number of work hours during the past 12 months}}$$

Severity rate (lost workdays) rate (per 100 worker-years per year):

$$= \frac{\text{Number of lost workdays during the past 12 months x 200,000 hours}}{}$$

Number of work hours during the past 12 months

Prevalence rate (all cases during period) rate (per 100 worker-years per year):

$$= \frac{\text{Total number of cases in the past 12 months} \times 200{,}000 \text{ hours}}{\text{Number of work hours during the past 12 months}}$$

a. Use incidence rates, if possible, since the incidence rate measures new cases occurring over a period of time, while prevalence rates give a "snapshot" picture of the number of individuals affected at a specific point in time. Incidence rate and severity rate allow monitoring of changes over time, rather than recounting chronic problems throughout the duration of the illness or injury.

b. Consistency in reporting is important; therefore, one should use either incidence, severity or prevalence rates for purposes of comparison.

c. If the specific number of work hours during the past 12 months is not available, multiply the number of full-time equivalent employees in each area by 2,000 hours to obtain the denominator.

Trained Ergonomics Personnel
Health care, industrial hygiene, environmental science, safety, or engineering personnel with approved training in ergonomics. Minimum acceptable training for activity-level trained ergonomics personnel is the basic 40-hour ergonomics course offered by USACHPPM or equivalent.

Working Community
All members of the work environment, at all levels of authority. It consists of DRMS/DLIS/DSIO Commanders, field Commanders, administrators, the designated DRMS/DLIS/DSIO EO, identified ergonomics personnel, occupational health care personnel, safety personnel, the CPO, contracting support, Operations and Maintenance Chief(s), Logistics Chief, union representatives, supervisors, military and civilian personnel. For the program to be successful, all members of the working community must be considered equal and share a commitment to using ergonomics to eliminate workplace injury and illnesses.

Work-related Musculoskeletal Disorders (WMSDs)

a. The range of health problems arising from repeated stress to the body encountered in the workplace. These health problems may also affect the nervous and neurovascular systems and may include the various occupationally induced CTDS, cumulative stress injuries, and repetitive motion disorders.

b. Damage to tendons, tendon sheaths, synovial lubrication of the tendon sheaths, bones, muscles, and nerves of the hands, wrists, elbows, shoulders, neck, back, and legs. Some WMSDs that are reported include chronic back pain, carpal tunnel syndrome, DeQuervains disease, epicondylitis (tennis elbow), Raynaud's syndrome (white finger), synovitis, tenosynovitis, stenosing tenosynovitis, crepitans (trigger finger), and tendinitis.

Worksite
Includes an employees general work area or environment with one or more workstations where limited functions are performed (i.e., loading dock, storage bay, etc.). The worksite may change such as during road construction but the workstations can remain the same (i.e., driver, loader, paver, etc.)

Workstation
An individual person(s) work area, where set tasks are performed using limited tools or equipment such as a grinding bench, computer terminal, truck cab or an individual inspection station.

INDEX

This index is organized alphabetically by topic and subtopics. Topics and subtopics are identified by paragraph number.